



Mission Execution: Debris Removal

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Objectives

- Mission Description
- PRT
- PSMA
 - Pre-scripted
 - Pre-Disaster / Emergency
 - Post Disaster
- Modeling/Estimating
- ACI Contract and Timelines
- Scoping
- Key Points

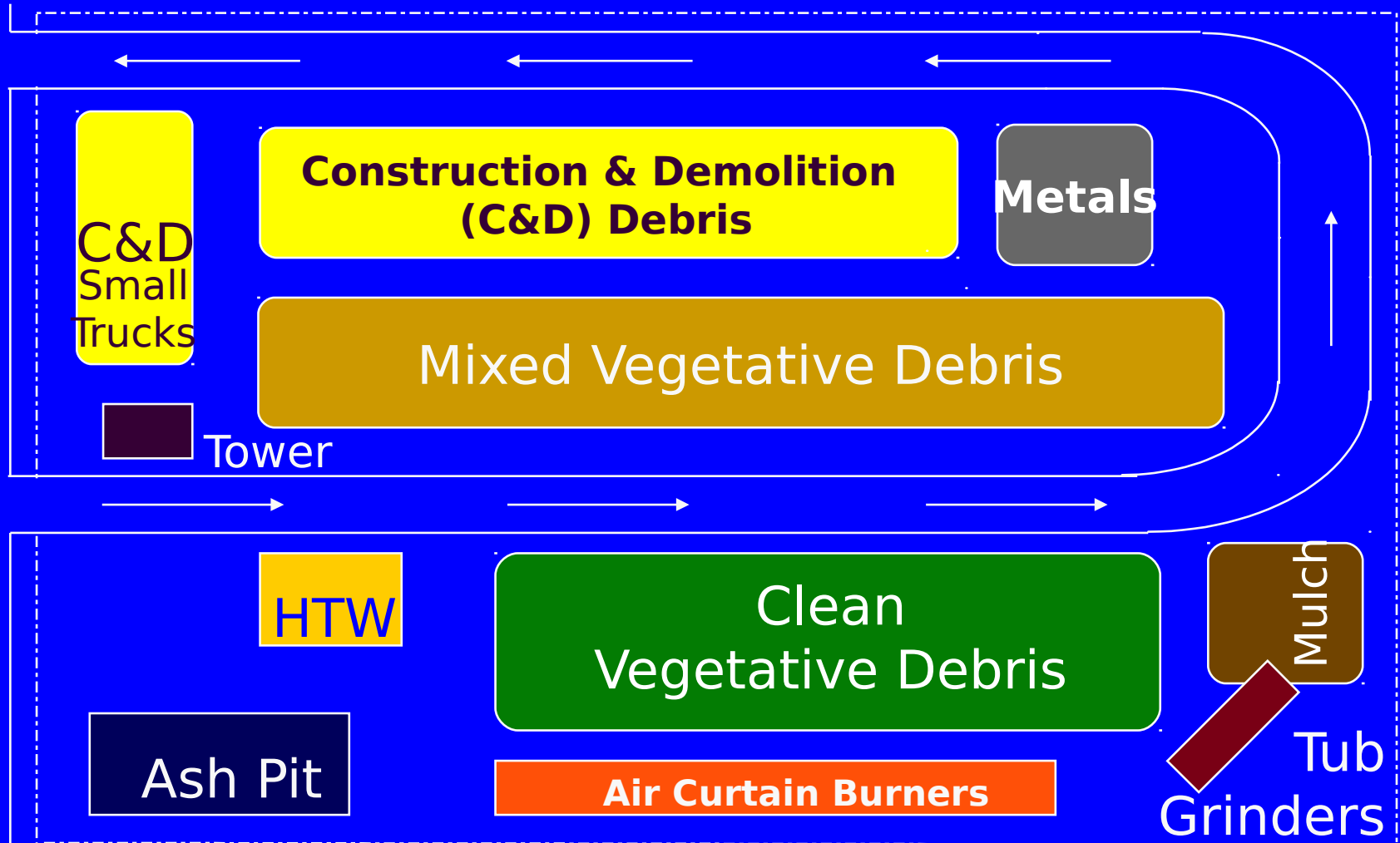


Mission Description

- Emergency Debris Clearance
 - Push debris out of rights of way for emergency traffic
- Removal/Disposal of eligible disaster related debris.
 - Debris removal includes pick-up, hauling, dumping, reducing, and disposal from public lands and when tasked, private lands.
 - Eligible debris may be wet debris, mobile homes, livestock, white goods, HHW, construction and demolition, vegetative, and contaminated waste.
 - Normal household waste or garbage is not classified as debris.
- Technical Assistance to state and local governments
- Federal Operations Support



A Typical Debris Reduction Site



C&S
Small
Truck



HTV

Vegetative Debris

Ash Pit

Air Curtain Burners

Tub
Grinders



C&D
Small
Trucks



To

HTW

Ash Pit

Clean
Vegetative Debris

Air Curtain Burners

Mulch

Tub
Grinders

A Typical Debris



Ash Pit

Air Curtain Burners

Mulch
Tub
Grinders

A Typical Debris



Ash Pit

Air Curtain Burners

Grinders

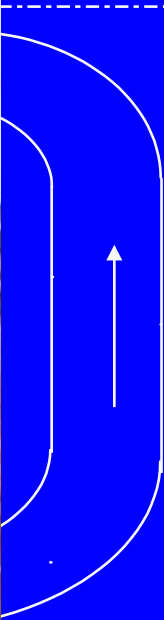


Ash Pit

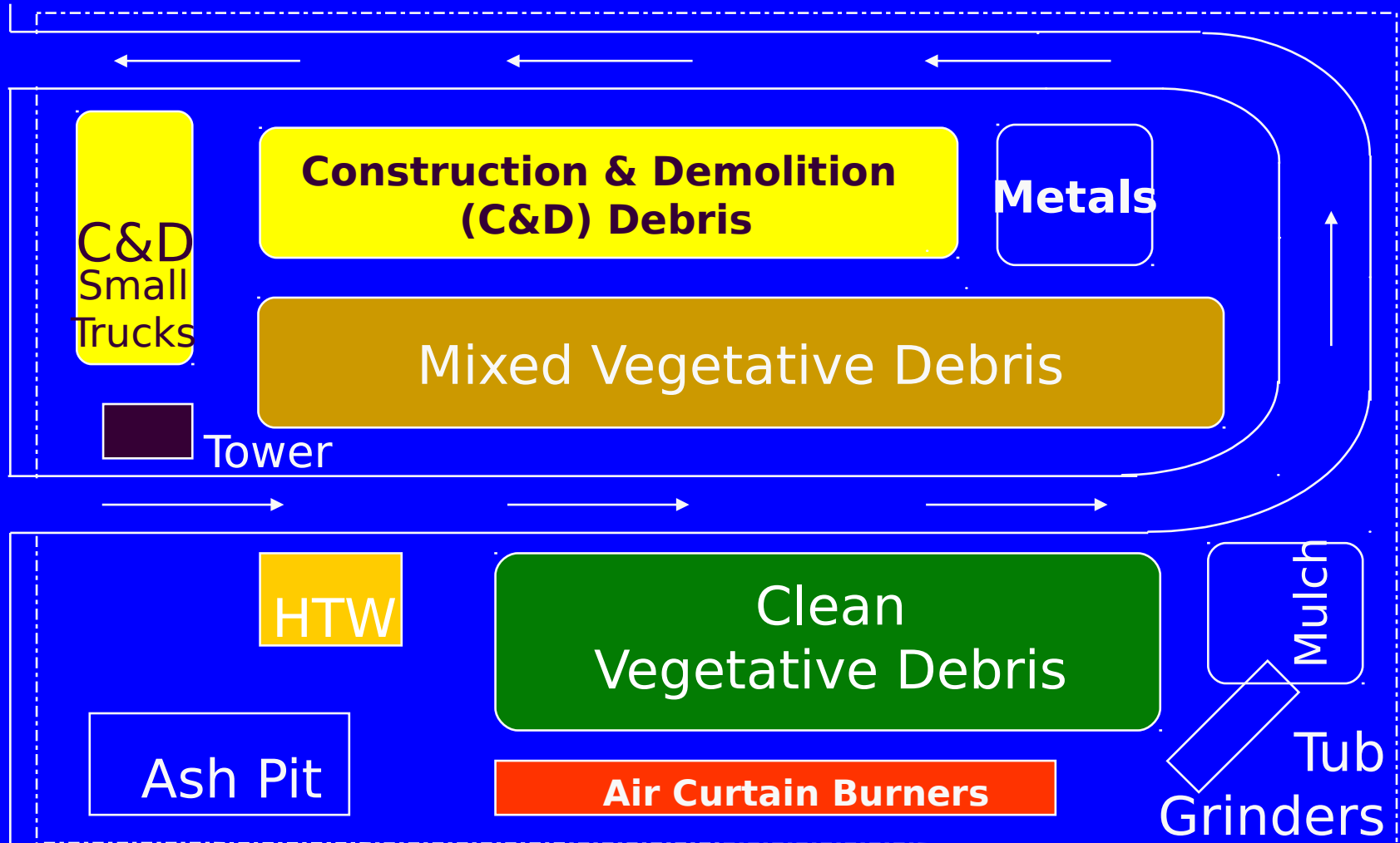
Vegetative Debris

Air Curtain Burners

Mulch
Tub
Grinders

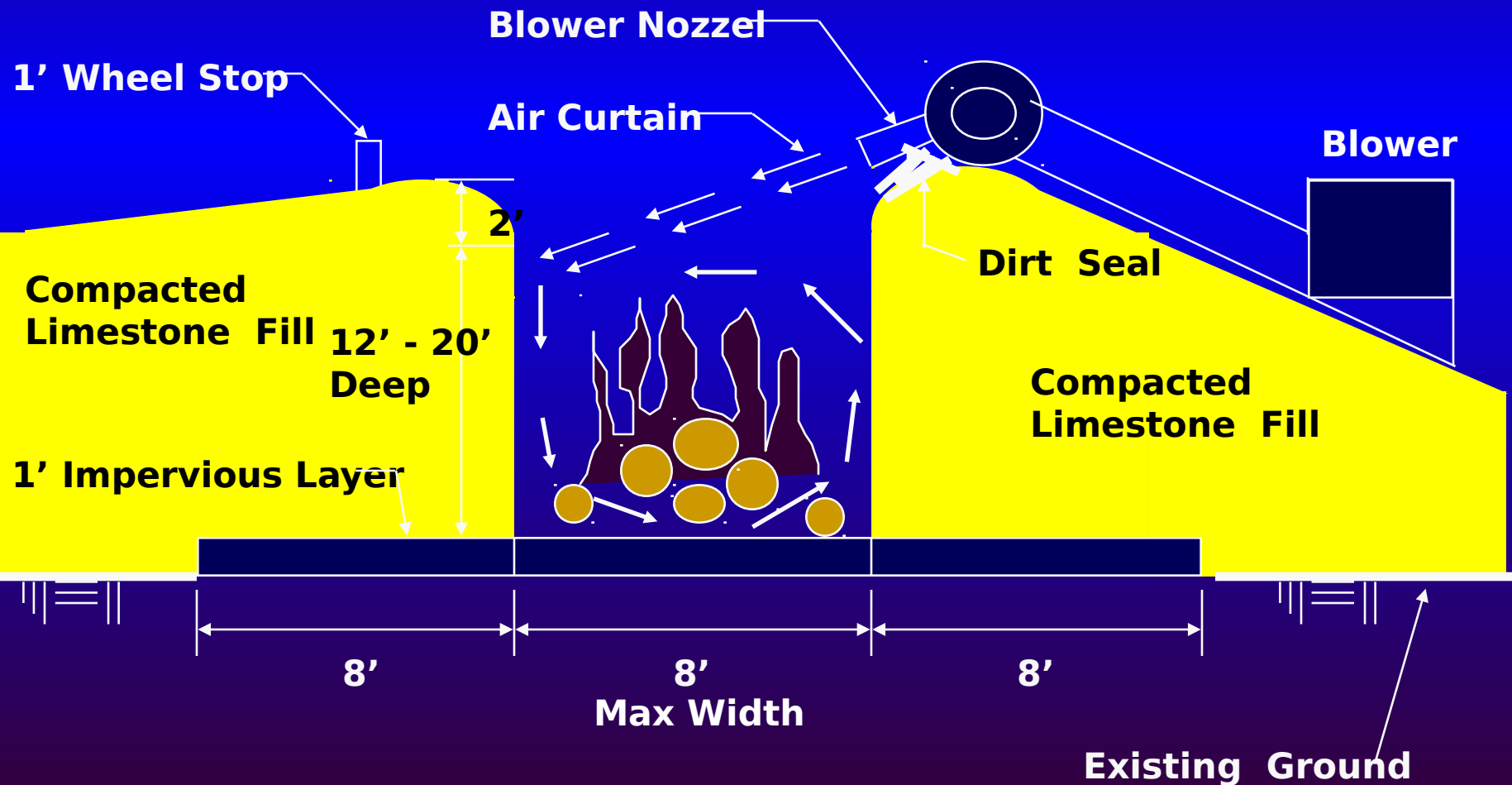


A Typical Debris Reduction Site





Incineration - Air Curtain









Ash Pit

Air Curtain Burners

Mulch

Tub Grinders



Vegetative Debris

Ash Pit

Air Curtain Burners

**Tub
Grinders**



Mulch

Tub
Grinders

Air Curtain Burners



Ash Pit

Vegetative Debris

Air Curtain Burners

Tub
Grinders

White Goods





Metal Bailing



Katrina Waste

Trained crews remove the ACM and place it into ACM bags



E-Waste is unloaded for cleaning and packaging



Modified trailers dispatched to collect material in individual bins to expedite handling



Waste is segregated and accumulated curbside for





Segregation is Key

PUBLIC MESSAGE

“Don’t “CHEAT” The Environment”

“C” - *Construction and Demolition, C&D*

“H” - *Household Hazardous Waste*

“E” - *Electronic Waste*

“A” - *Appliances, (White Goods)*

“T” - *Trees or Vegetative Debris*



Wet Debris

- **Wet debris is within the scope of the ACI contracts for debris.**
- **FEMA mission assignments do not supersede USACE authorities concerning Federal channels.**
- **The current agreement between the USCG and USACE is that vessels that can be re-used or “salvaged” will be the responsibility of the USCG. Vessels that are not re-usable and considered “debris” will be removed by USACE, if declared eligible by FEMA.**
- **All other eligible wet debris will be the responsibility of USACE in coordination with other support agencies.**



Planning & Response Team



Debris Team

JFO

ESF-3 - Action Officer

RFO

Mission Manager
Mission Specialist
Contract Specialist

Management Team

EFO(S)

Resident Engineer(2)

Office Engineer (2)

QA Team Leader(2)

Real Estate (2)

Database Manager

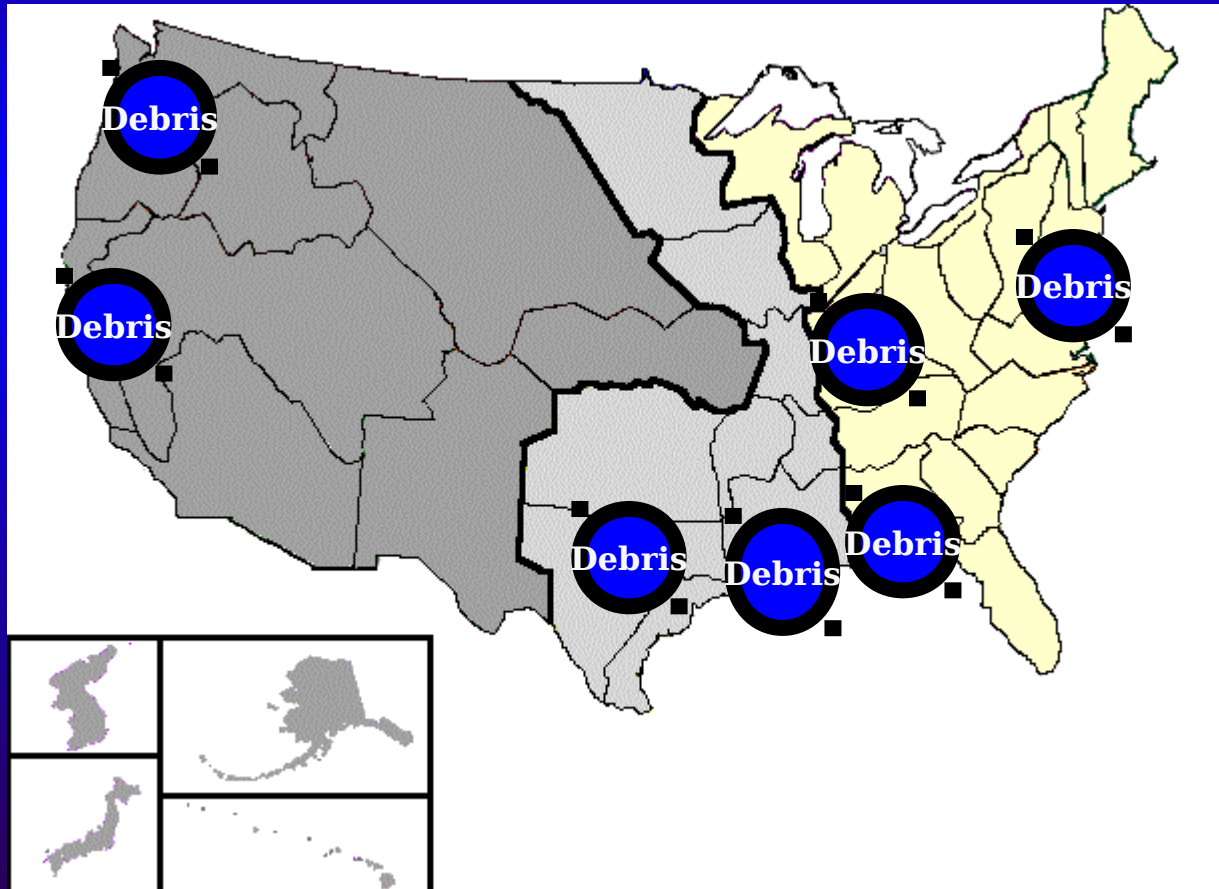
NEPA Compliance Manager

Environmental Engineer

Support Team



Debris Removal Teams



- Lead Division MVD
 - Districts
 - Mobile
 - Sacramento
 - Louisville
 - Baltimore
 - New Orleans
 - Ft. Worth
 - Portland



Debris Removal Pre-Scripted Missions

- Pre-Declaration
 - Federal Operations Support-\$40K
- Post Declaration
 - Direct Federal Assistance-\$5M
 - Oversight, Federal Operations Support-\$700K
- Technical Assistance - \$100K



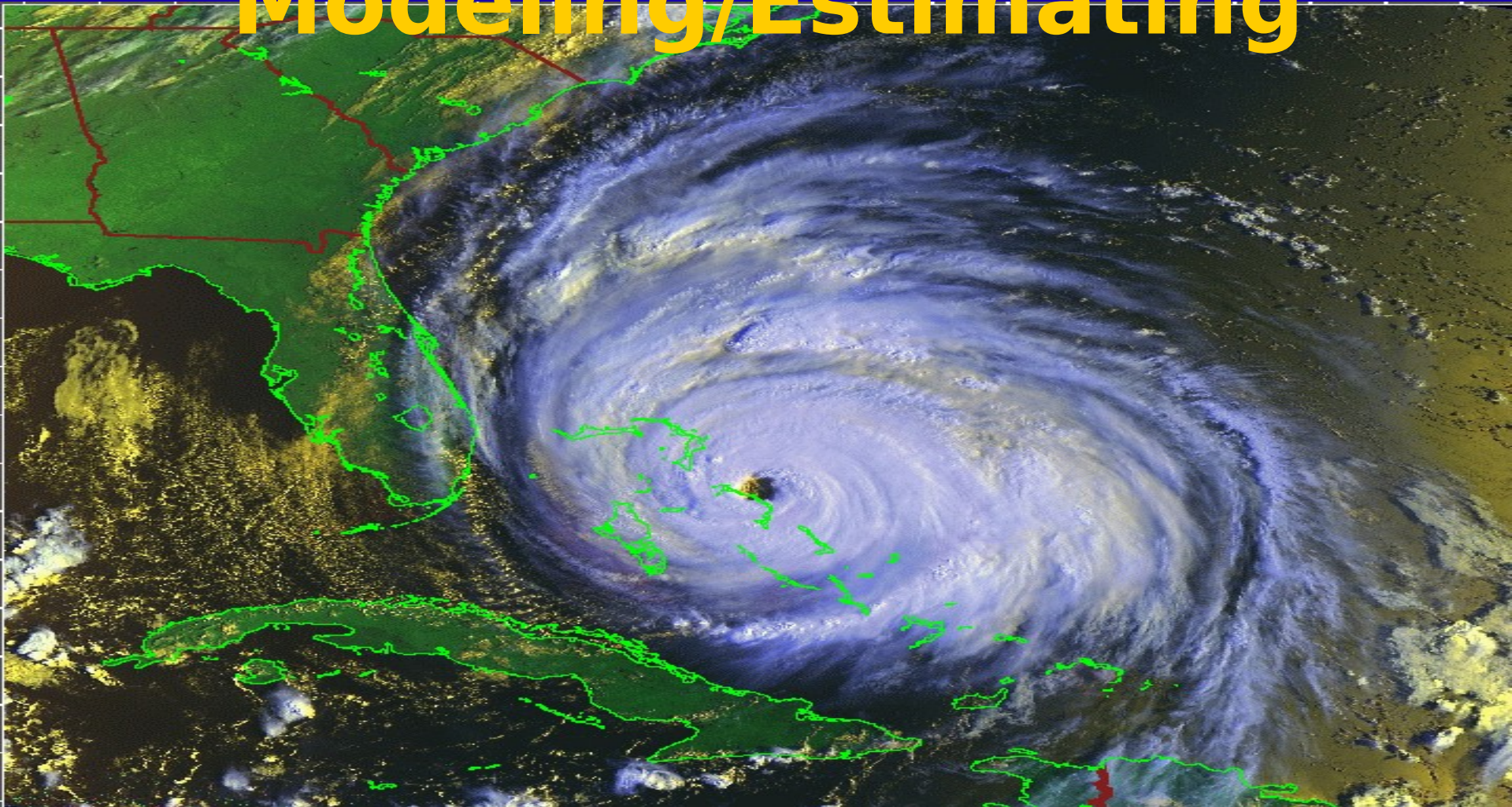
Debris Coordinating Committee

- Multi-agency organization
 - FEMA
 - ESF #3 (USACE)
 - Contractor Ops Manager
 - BOR
 - ESF #10 (EPA)
 - US Coast Guard
 - State Agencies
 - Local Agencies (if appropriate)
- Ensures Coordination of Debris Operations
- Debris Management Planning
- Means of Resolving Issues Early
- Minimizes Duplication of Effort



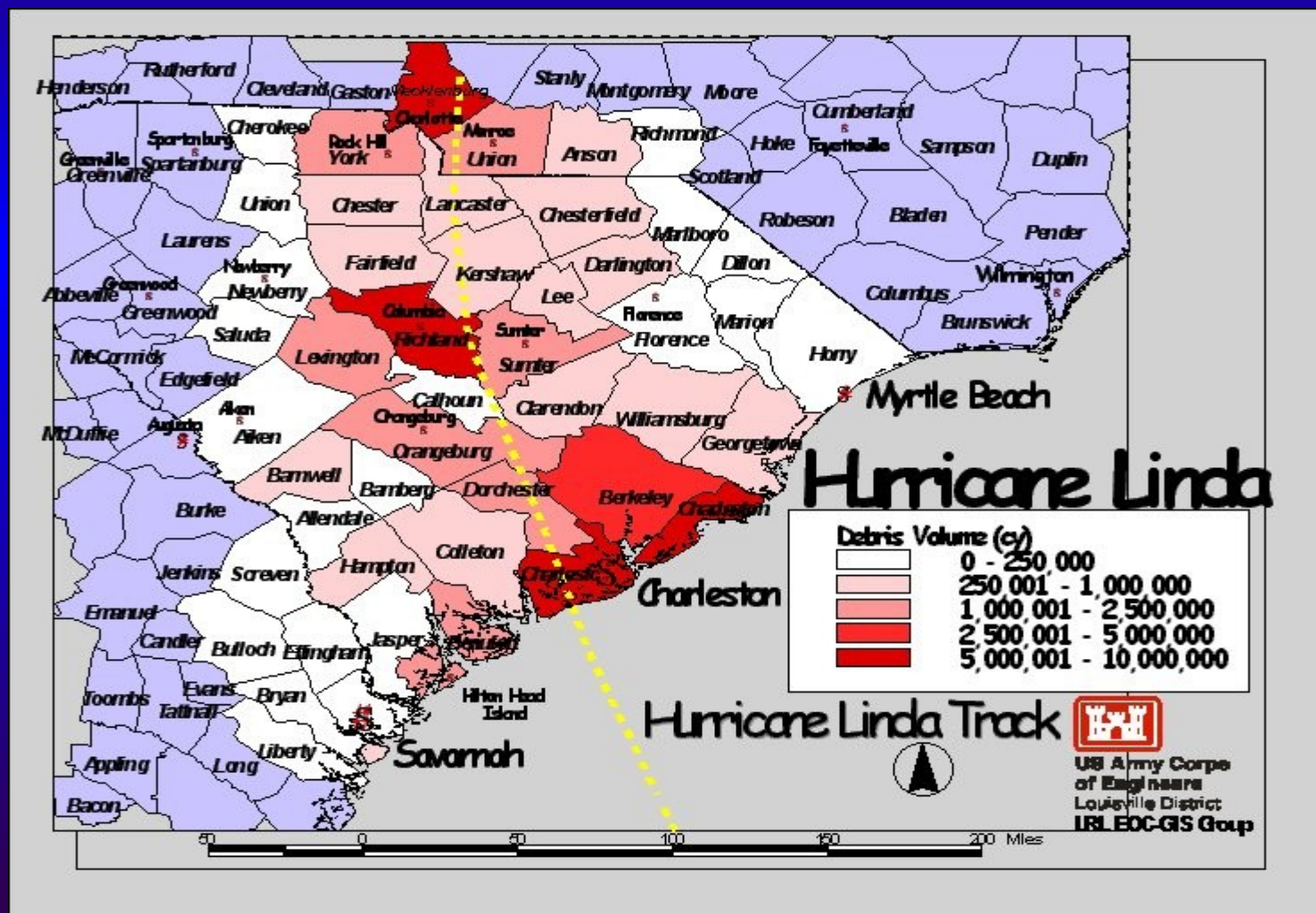
Pre- and Post-Landfall Debris

Modeling/Estimating





Modeling





USACE Debris Model

www.englink.usace.army.mil

**Output in South Carolina
35,964,493 cubic yards**

County	Quantity (cy)
Berkeley	3,627,191
Charleston	8,438,115
Dorchester	1,216,567
Colleton	503,508
York	2,311,191
Lancaster	798,478
Chester	471,183
Chesterfield	565,024
Kershaw	638,580
Fairfield	326,547
Darlington	905,911
Lee	270,041
Richland	5,021,815
Lexington	2,454,942
Sumter	1,803,948
Clarendon	416,698
Williamsburg	539,217
Calhoun	186,789
Georgetown	678,170
Orangeburg	1,490,498
Barnwell	297,225
Bamberg	247,558
Hampton	266,438
Jasper	226,833
Beaufort	1,519,006
Cherokee	50,143
Union	34,180
Marlboro	33,080
Dillon	32,802
Newberry	37,374
Florence	154,593
Horry	194,760
Marion	38,193
Saluda	18,429
Aiken	136,259
Allendale	13,207
	35,964,493



FEMA/USACE Debris Estimating Initiative

- **~~Standardized Process~~**
- **Goal - Increase Accuracy of Estimates - Shooting for +/- 10%**
- **Better Estimates Allow FEMA to Maximize Advance Payments to Local Governments Who Self - Perform**
- **Buy-in From Federal, State and Local Share Holders**
- **Approach Based On:**
 - **Improving Accuracy of Models**
 - **On-Site Field Sampling**

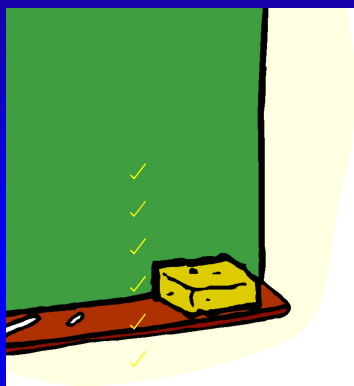


Debris Estimating Initiative

- Phased Study
- Five Work Elements In Phase I
 - Historical Data Collection
 - Improve Accuracy of USACE Model
 - Investigate Other Mathematical Model(s)
 - Develop Field Sampling Methodology
 - Field Guide For On-Site Sampling
- Final Draft, Phase I - Submitted to FEMA 23 May



Debris Estimation Initiative





Advance Contracting Initiative (ACI)

Parameters and Timelines



Advance Contracting Initiative

- Contracts Awarded In Advance of An Emergency
- Contract Awards For High Risk Areas
- Standardizes Solicitation and Acquisition Procedures
- Unrestricted and Restricted Contract Awards
- Short Term Strategy

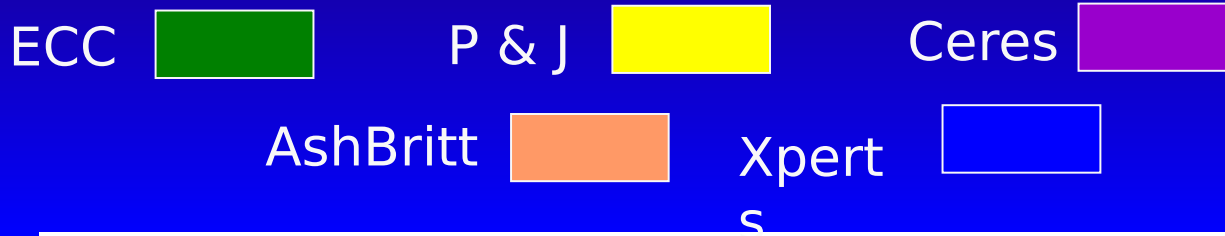


Unrestricted Debris ACI Contracts

- **“SATOC” - Single Award Task Order Contract**
- **10 Regions - One Contract / Region Plus a Designated Back-Up Contractor**
- **Base Year Plus 4 Option Years**
- **Each Contract Capacity is \$50 Million / Year / Contract**
- **Performance Contract**
 - **Production**
 - **Planning**
 - **Quality control**
 - **Safety**
 - **Sub-contracting**
- **Automated Debris Management System, ADMS**
 - **Smart Card Technology**
 - **Reduce QA's to a 1 to 3 Ratio**
 - **No More Hand-Written Tickets**
 - **Faster Contractor Payments**
 - **Insight to Key Information and Reports**

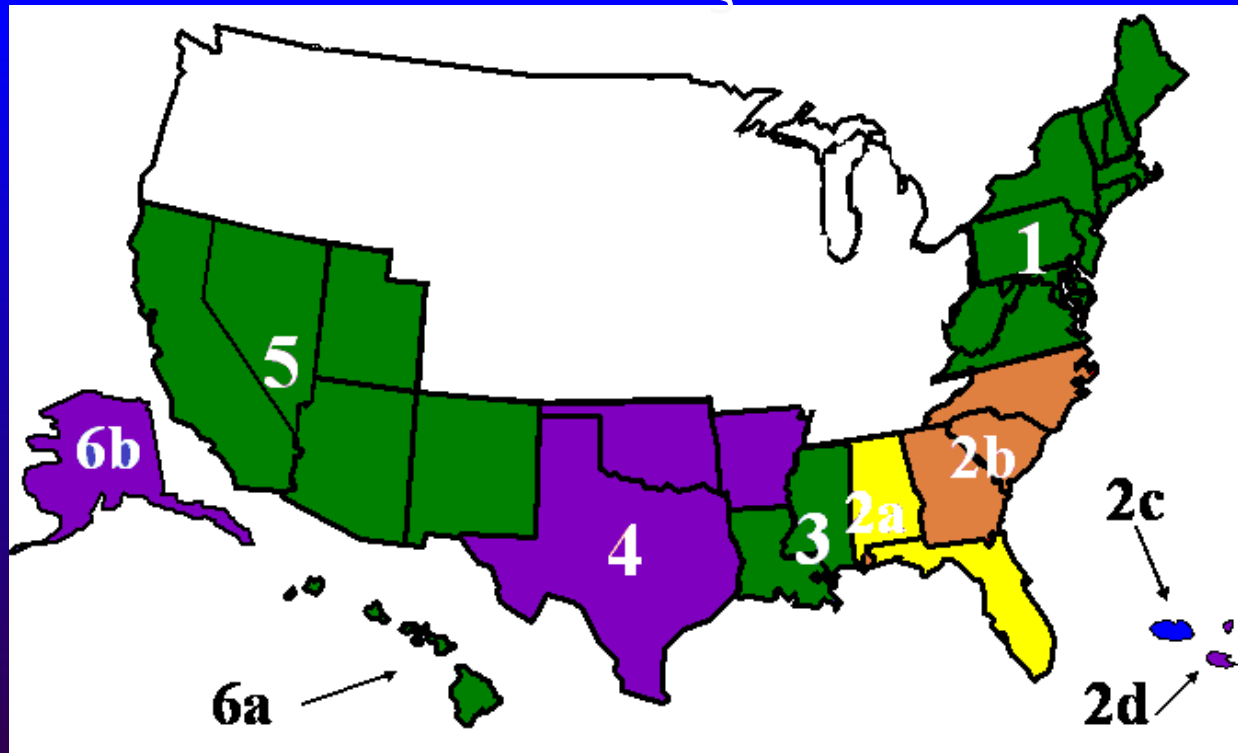


Unrestricted Debris ACI Contractors



Reach Back:

- 1: P&J
- 2a: Ceres
- 2b: P&J
- 2c: None
- 2d: None
- 3: AshBritt
- 4: P&J
- 5: P&J
- 6a: P&J
- 6b: P&J



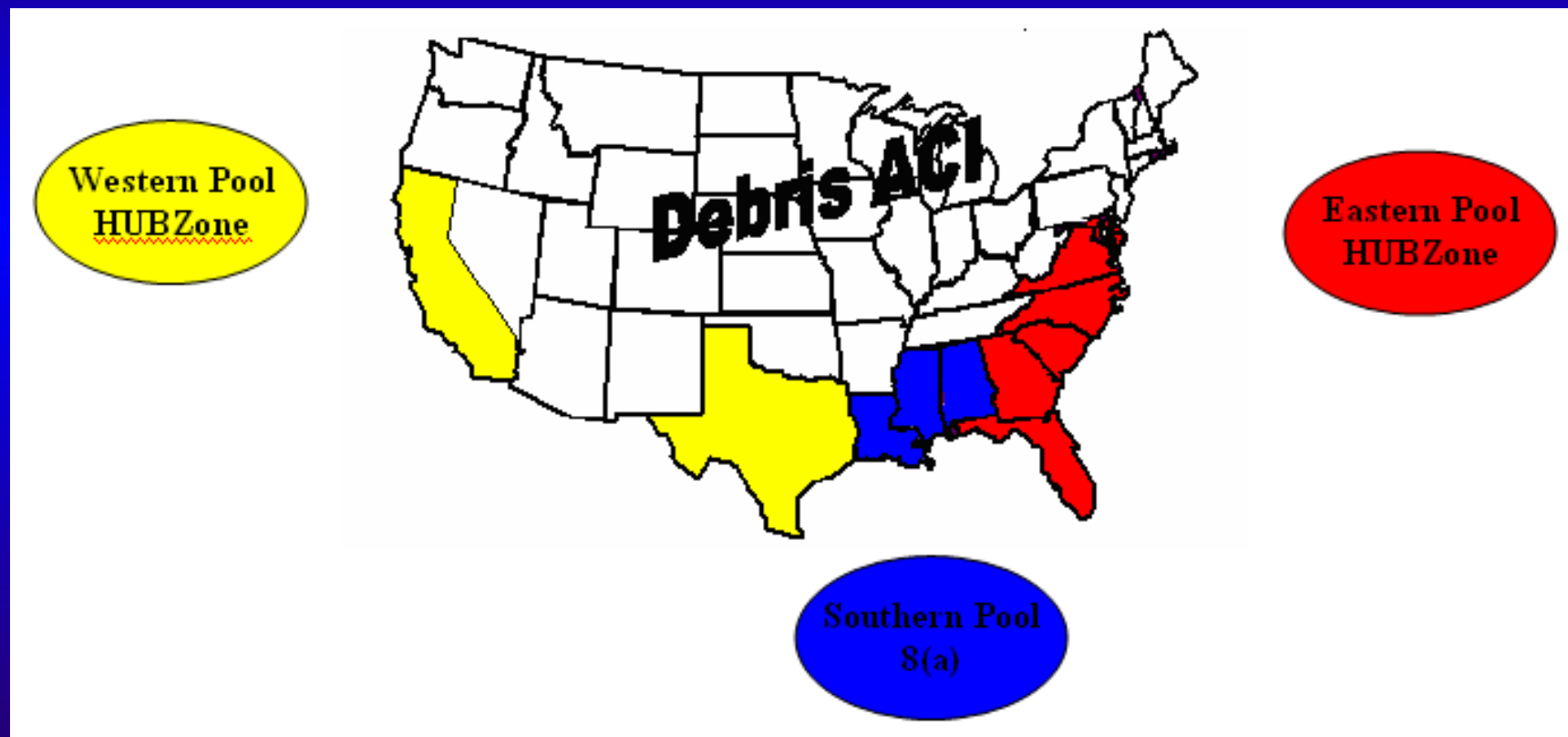


Restricted MATOC Contracts, 8(a) & Hub Zone

- **“MATOC” - Multiple Award Task Order Contract**
- **3 Regional Pools - West, Central and East**
- **Base Year Plus 4 Option Years**
- **\$200 Million Capacity / Region For Total of \$600 Million**
- **Performance Contract**
 - **Production**
 - **Planning**
 - **Quality control**
 - **Safety**
 - **Sub-Contracting**
- **MATOCs Utilize ADMS From SATOC**



New ACI Concept MATOC Pools





How Will It Work?

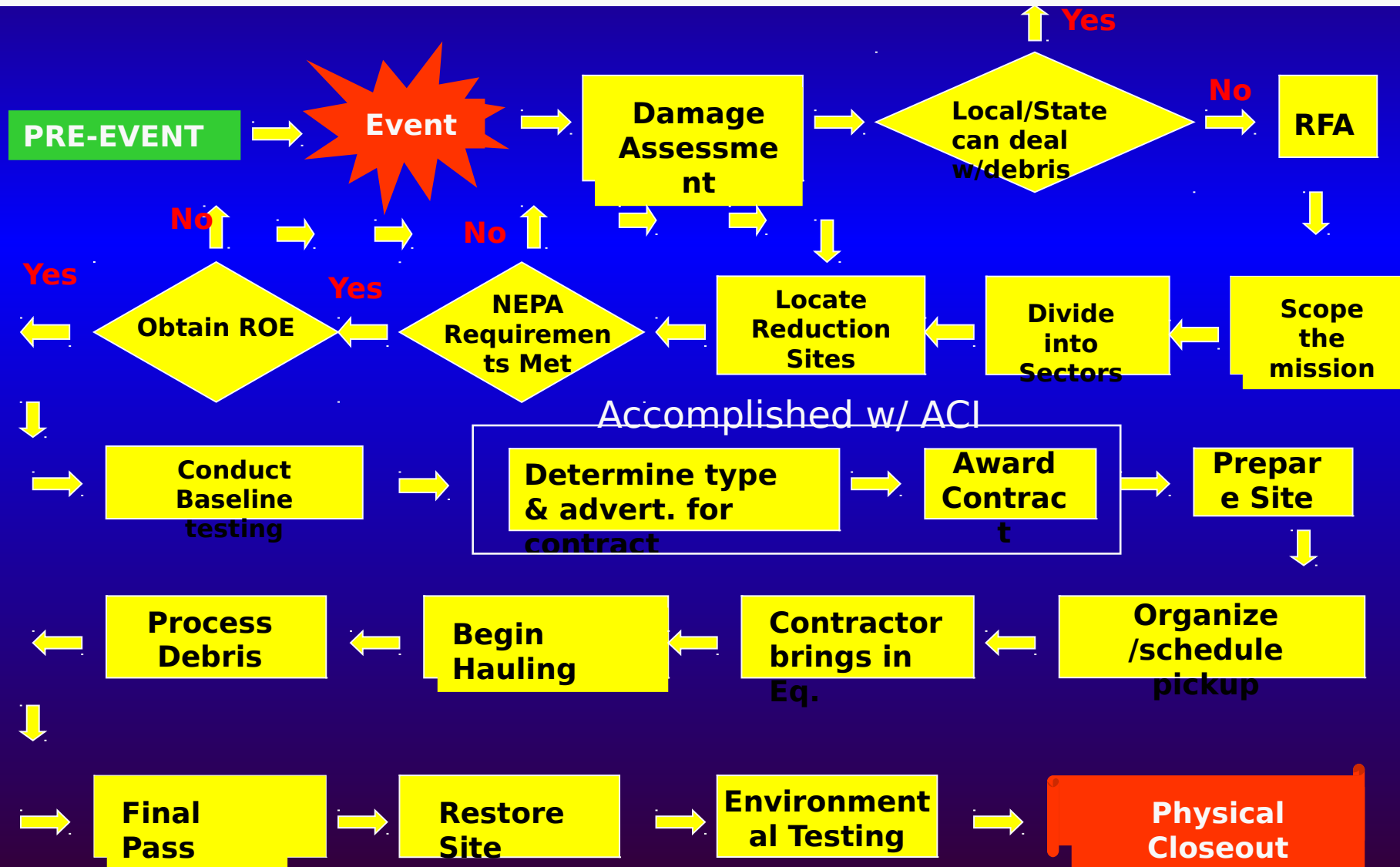
- Event Occurs In a Particular Region
- SATOC Contractor Mobilizes For Planning
- < 500K CY of Debris: MATOC Executes
- 500K – 10M CY of Debris: SATOC & MATOC Executes
- > 10 M CY of Debris: SATOC, MATOC & Back-Up Executes



Mission Scoping



Evaluation of Debris Mission





Debris Mission Execution Timeline

- D-3 USACE Deploys Debris Mgmt Cell, Planning
- D+1 Debris Mgmt Cell Conduct Initial Assessments
- D+5
 - PRT Coordinates Scope/Magnitude of Mission w/ Involved agencies
 - Develop Priorities, Sectors/Zones & Personnel Requirements
- D+6 USACE Issues Task Order to Contractor
- D+10 Contractor Mobilizes
- D+11 Contractor Prepares Reduction Site
- D+12 Contractor Begins Debris Removal



Pre-Event Planning

- Work with FEMA, State, & Local governments
- ✓ FEMA, Debris Pilot Program
- Determine Existing Capabilities
- Determine Preliminary Action Plan
 - Sites
 - Landfills
 - Reduction Methods, Recycling Opportunities
 - Environmental Concerns
- Estimate Resources Required
- Determine Combinations of SATOCs and MATOCs and How They Will Be Used
- Technical Assistance Teams



DEBRIS PILOT PROGRAM

- Incentive For State/Local Govts To Execute
- Extends Thru 31 December 2008
- 5% Break On Cost Share
- Keep Proceeds From Recycling
- Regular Labor And Overtime
- Locals Must Have:
 - Debris Mgmt Plan Approved By FEMA
 - At Least 2 Certified Debris Contractors



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Key Points

- ACI Operations Plans Required As To How Best Engage the SATOCs and MATOCs.
- Environmental Impacts, Asbestos, Termites, HHW, e-waste
- Recycling Will Continue To Be a Driver
- FEMA Pilot Program
- Wet Debris
- Technical Assistance
- Debris Estimating Initiative
- FEMA Monitors versus FEMA Debris Specialist
- Contaminated Debris Management Teams



Mission Execution: Debris Removal

